

Template



Clariant

Clariant Corporation is a U.S. affiliate of Clariant Ltd., a Swiss-based global specialty chemical company, which manufactures and markets a wide range of specialty and fine chemicals for the pharmaceutical, agrochemical, electronic, plastics, paints and coatings, textile, paper, leather, metal, household and personal care products and chemical processing industries.

1 20-30 US sites

October 14, 2003



Evolution of Clariant



2

October 14, 2003

Meeting Goals

Begin dialogue with EPA and share information including:

- Clariant Pigment Red 144 and Pigment Red 214 (Red 144/214) manufacturing process at Coventry
- Discovery of PCB contamination in Red 144/214
- Response actions taken to date
- Issues that need to be addressed regarding further actions

3

October 14, 2003

Pigment Production

- Pigments based on di- and trichloroanilines have the potential to inadvertently generate PCBs
- Recognized by EPA in TSCA PCB rulemaking
See 48 FR 50486 (1983) *included products*
- Excluded manufacturing process filing covers manufacture of di- and trichloroaniline based pigments
- The Red 144/214 processes are part of the notification under 40 CFR 761.185(a) to EPA made by American Hoechst Corporation (now part of Clariant) in 1985

4

October 14, 2003

*AM Hoechst
filed 1985 →*

TSCA Confidential Business Information



Clariant Red 144/214 Pigment Manufacture

- These pigments have been made by Clariant at sites outside the United States for 10 years *Begin Aug. 2001 214*
- CONFIDENTIAL BUSINESS INFORMATION
- CONFIDENTIAL BUSINESS INFORMATION

5

October 14, 2003



**Clariant Red 144/214 Pigment Manufacture
Pre-Manufacture Activities**

- Review of production processes used in Europe
- Lab scale production
- Intermediate and lab produced product testing
- Amounts of PCB in intermediate matched amounts of PCB in the finished product
- Conclusion that PCB generation potential is found in the diazotization stage and not the condensation reaction
- Therefore, testing of intermediate appeared to be appropriate control

6

October 14, 2003

TSCA Confidential Business Information



Clariant Red 144/214 Pigment Manufacture Basic Process

Confidential Business Information

7

October 14, 2003

TSCA Confidential Business Information



Clariant Red 144/214 Pigment Manufacture Historical Data

- Batch process used to create commercial lots of pigments based on color properties
- Confidential Business Information

8

October 14, 2003

Pigments and Additives Division Global Quality Initiative

- Program designed to globally coordinate QC and analytical data on products
- Protocol considered international guidelines, (EU, USA, Japan, France, Austria, Australia, Germany, etc)
- Prioritized international products and newly made or introduced products
- Protocol matrix may include metals, primary aromatic amines, aromatic amino sulfonic acid, polychlorinated biphenyls (PCB)
- Red 144/214 testing completed in September 2003

9

October 14, 2003

TSCA Confidential Business Information

Clariant Red 144/214 Pigment Analytical Results

Confidential Business Information

10

October 14, 2003

Initial Responses

- Production of Red 144/214 stopped and material quarantined
- Occupational health and exposure assessment experts retained and employees informed of results
- Confirmatory sampling and sampling of historical batch retains
- Customers notified and informed of our engagement of Clean Harbors to retrieve product for disposal
- Regulatory notifications - EPA and RIDEM

11

October 14, 2003

Regulatory Notifications

EPA Reporting

- Clariant made self-report under audit privilege.
- Initial notification made to Tony Ellis of OECA at EPA Headquarters.
- Matter referred to Geraldine Gardner who was contacted by telephone and with a follow-up letter. After internal EPA consultations, Ms. Gardner recommended that Region 1 would take the lead on this issue to coordinate EPA response.
- Contacted Ms. Deborah Brown and sent copies of prior correspondence with EPA.
- Program questions referred to Peggy Reynolds, also at Headquarters.

12

October 14, 2003

Regulatory Notifications (cont.)

RIDEM Reporting

- No mandatory reporting was determined to apply to RIDEM.
- Self-report made for informational purposes to Mr. Jan Reitsma, Director of RIDEM.
- Follow-up letter sent to Mr. Reitsma.

13

October 14, 2003

Evaluation of Production Process Issues

Process Development Lab proceeding on 3 paths after we identify source of PCB formation:

- Eliminate by-product that forms free radicals to stop PCB formation, or
- Add free-radical scavenger to stop free radical formation from by-product, or
- Minimize PCB formation, prevent PCBs from remaining in product, concentrate in still bottoms
 - This process is being evaluated for product recovery as well

14

October 14, 2003

Regulatory Issues and Open Questions

- Possibility of reprocessing off-spec material
 - 40 CFR 761.60(e)
 - Procedure to obtain EPA approval to reprocess contaminated pigment
 - PCBs will be concentrated in solvent still bottoms and incinerated
- Transport of inventory at Clariant Mexico back to Coventry site for either reprocessing/disposal (40 CFR 761 subpart F)

SARA 313 Reporting

- Coventry Site has submitted Form R's for PCB releases for 2000,2001,2002.
- There was not a 313 report for previous years due to de minimis concentrations
- All reported releases were for off-site transfers, based on conservative estimates, not analytical
 - 2000-0.66 pounds
 - 2001-0.82 pounds
 - 2002-0.29 pounds
- Review need for filing amendments